

### Dear Little Recyclers,

Having fun and taking care of our environment go together naturally. This activity book gives you some fun activities that will help you think about ways to protect our Planet Earth by reducing waste and recycling.

We should all try to use less, so we make less trash. We can reuse many bags, boxes, and other containers, which reduces the amount of trash created. Much of the trash we end up with can be recycled and made into new items.





Prepared by the Brazos Valley Solid Waste Management Agency.

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### So What can Recycling Do?

Can be turned into...

Used aluminum cans...





Brand-new cans!



Used glass bottles & jars...





Brand-new bottles & jars!



Used plastic bottles...





Yard furniture!



Old newspapers...





Toilet paper, paper towels, pencils, & even rulers!



### what is recycling?

Recycling means taking materials from products like soda cans, paper, & plastic bottles and making BRAND NEW products with them!!

| Do | you have any recycle<br>stuff in your home?<br>List 'em! | ·C |
|----|--|----|
|    |  |    |
|    |  |    |

Talk to your mom and dad about recycling here are a few important points you can make:

- 1. It's easy! All you have to do is sort!
- 2. It's good for the environment
- 3. It teaches me to love my planet
- 4. You give back to the environment
- 5. It saves space in the landfill
- 6. You won't have to empty the trash as much
- 7. Constant cycle of reusing old materials to save resources
- 8. Recycling paper saves trees
- 9. And you can make extra money recycling!

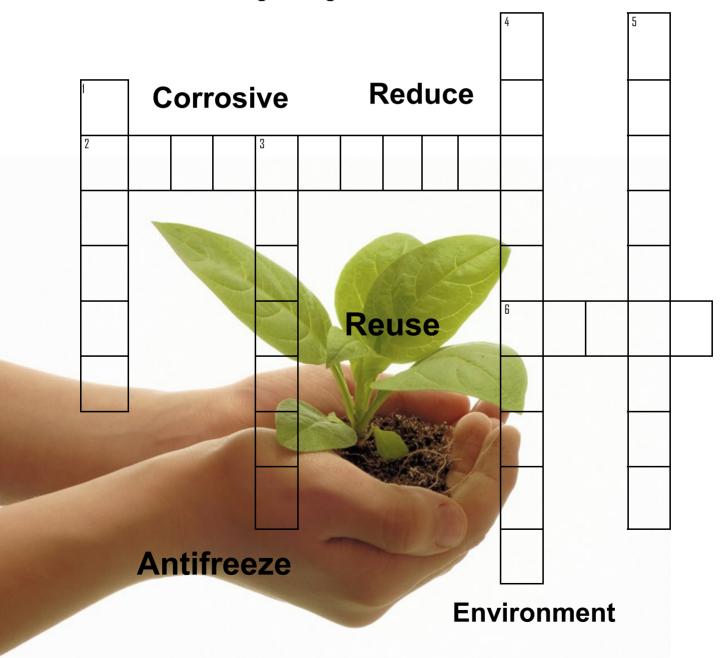


#### Down

- 1. To decrease the amount of trash you throw away.
- 3. What do communities do with their newspapers, bottles, and cans?
- 4. A chemical used to change the freezing temperature of water.
- 5. Contains acids or bases that can corrode metal.

### **Across**

- 2. Your world, surroundings, air, water, land, everything
- 6. To use something over again.



Composting

Decomposition, what does it mean? Decomposition is the rotting of materials like fruits, vegetables, trees, leaves, tree limbs, and plants. Good bacteria eats it all up so that Planet Earth can use it again! The material is similar to soil but it's really healthy, like nutrients for Planet Earth. Different things in our garbage break down at different rates. Start a compost pile and experiment with different items and log how long it takes for them to break down.

Talk to your parents and teachers about starting a compost pile. All you need is:

- 1. An area that measures 3 ft x 3 ft x 3 ft, where water does not puddle when it rains.
- 2. Place a compost bin or a pile on half of this space mixing brown materials and green materials in equal parts by weight, or about 3-1 (brown to green) by volume. Make sure that your parents and teachers help you out with this. Chop or shred woody materials for the pile. Water the pile as you build it to keep it thoroughly moist like a wrung out sponge.
- 3. Build the pile to a height of 3 feet to speed up the composting process.
- 4. Mix greens and browns as you add to the pile. When adding kitchen scraps, bury them 10 inches or so into the pile to avoid attracting pests.
- 5. Turn the pile over with a hay fork or shovel every two to three weeks; add water as needed. You will really need help with this step!
- 6. Finished compost can be sifted out and used when the materials break down and smell "earthy" like rich soil. These are the vitamins & nutrients I keep telling you about!

Almost forgot!
Green Materials:
Vegetable & fruit scraps, green
grass clippings, and manure are
"green."

Almost forgot!
Brown Materials:
Dead leaves, dry hay, wood
shavings, and shredded paper are
"brown."

# Vermicomposting

Eisenia foetida (commonly known as red wiggler, brandling, or manure worm)

This is the process of using worms to process organic food waste into nutrient rich soil called **vermicompost!** 

Do they have noses?

Nope, they breathe through their skin. Remember all living things have to have air. Like you!

Do they have eyes?

Nu-uh, they use light sensitive skin cells to sense light & move away from it. Remember to keep a lid on YOUR bin to keep light out!

Do they have teeth?

No way, they are invertebrates which means they do not have any teeth or bones in their entire body! It can also eat just about anything that is mushy.

# You want to make a worm composting bin?

How to Vermicompost!

### Supplies needed:

Newspaper or Office Paper Kitchen Waste Nylon Screen (Wash thoroughly) 2 - 10-20 gallon bins (Wash thoroughly) 1-2 pounds of worms (Red Wigglers no Earthworms) Garden Utensils (optional)

### Location...

Choose a quiet shaded area in your backyard or even your utility room. If the worm habitat is maintained correctly there is no odor. You may even forget they are there!

### Bin...

For a family of four 1 plastic bin that is 2 feet x 3 feet x 1 foot is large enough. Make sure your bin has a lid to maintain the right temperature & humidity. First, to make sure that the worms can breathe & the bin won't smell, drill twelve, 1/2 inch holes in the bottom of the bin & in the bin's lid. Make them about 2 inches apart from each other. By having plenty of oxygen present throughout the bin, microorganisms & worms can break down wastes aerobically much more rapidly & the worms will not suffocate. Place a fine mesh screen at the bottom of the bin. You will probably have to cut it to make it exact. This screen makes sure your worms cannot escape and it also prevents you from losing vermicompost.

### Bedding...

Worms need to be comfortable and they need to feel safe. Take a stack of newspapers or office paper. Unfold it and tear into 1 inch strips. When finished wet strips of paper and squeeze the water out until it feels like a wrung out sponge. Put the strips loosely in the bin and fill 1/2 way. Remember worms need a moist environment. Keep a spray bottle nearby when it starts to dry out spray as needed. Also avoid using the glossy inserts if you are using a newspaper.

### Finally...

Place the worms on top of the bedding. They will find their way to the bottom of the bin because they are sensitive to light. Divide your bin into imaginary sections and add kitchen scraps in 1 section of the bin. They should only be fed twice a week depending on how fast they are eating.

### What do I feed my worms?

Leftover kitchen scraps are a prime source of nutrition. Food scraps must be covered up all the way with the worms' bedding in the bin so there won't be any odor. flies, or mold. Keep in mind you shouldn't give them everything, there is some food that they do no find very tasty.



Where do I get my worms & where can
I get more information about the Compost Training Class?
Call BVSWMA at 979-764-3806

# Answers: 1. Reduce, 2. Compost, 3. True, 4. Soil, 5. Recycling, 6. Mulch, 7. Odor.

### When things rot they will eventually turn into material that looks like dirt called



- 1. When you compost, you can r\_\_ \_ \_ the amount of trash you create.
- 2. You can build a c\_\_ \_ \_ \_ pile with the help of an adult.
- 3. With time and a little work, you will have rich compost. T/F
- 4. Compost can be mixed with s\_\_ \_ \_ to help plants grow!
- 6. Compost can be used as m \_\_\_ \_ around trees and shrubs. It helps to protect the roots and keep the soil moist.
- 7. Fish and meat scraps do not belong in a compost pile. They may give it a bad o \_\_\_ \_\_\_.

## What is Household Hazardous Waste?

HHW is chemicals found in your home that is poisonous, combustible, explosive and or flammable and is hazardous to YOU and the

Almost every home has hazardous chemicals! Can you try to name a fex?

ENVIRONMENT.



### Just to name a few HHW items:

**Paint** 

**Paint Thinner** 

Medicine

**Batteries** 

Chlorine

Computers

Antifreeze

Car Oil

Glue

Bleach

**Bug Killers** 

**Weed Killers** 

Even Nail Polish Remover!



How many of these items do you have in your home? \_\_\_\_\_

Talk to your parents about these items, read the labels, learn about them, and see why they are dangerous to YOU and the ENVIRONMENT.

Never handle any of these items without permission and supervision by your parents or a responsible adult!

### Household Hazardous Waste Word Search

Can you find all of the words below? They are hidden diagonally, backwards, vertically, & horizontally.

| S | K | Q | R | S | Н | C | X | E | Н | R | K | J | S | S | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| O | A | E | P | S | D | Z | E | I | T | G | E | J | S | E | E |
| V | C | Н | E | R | F | P | F | G | V | E | L | G | Н | P | O |
| S | I | L | N | X | E | T | A | L | 0 | A | A | S | N | G | T |
| T | D | A | 0 | P | A | I | N | T | A | E | 0 | 0 | P | A | R |
| D | E | V | I | S | 0 | R | R | 0 | C | M | I | T | P | C | D |
| P | E | S | T | I | C | I | D | E | S | T | M | W | V | X | N |
| O | D | Н | A | Z | A | E | D | O | U | S | W | A | S | T | E |
| S | R | E | N | A | E | L | C | L | S | R | Y | T | В | L | S |
| N | 0 | S | I | 0 | P | S | L | O | S | 0 | R | E | A | L | U |
| A | D | R | M | D | T | 0 | X | I | C | E | U | R | V | I | E |
| Z | I | P | A | C | P | G | E | L | C | Y | C | E | R | P | R |
| A | A | N | T | I | F | R | E | E | Z | E | R | U | I | S | A |
| L | A | L | N | 0 | I | T | U | A | C | В | E | E | D | C | G |
| G | A | S | 0 | L | I | N | E | Z | D | Н | M | K | A | E | C |
| S | S | A | C | Н | E | M | I | C | A | L | S | 0 | I | L | R |

Acid
Aerosols
Air
Antifreeze
Caution
Chemicals
Cleaners
Contamination

Corrosive
Danger
Flammable
Gasoline
Hazardous Waste
Latex
Mercury

Oil

Paint
Pesticides
Poison
Pollution
Recycle
Reduce
Reuse
Soil

### Tips for Mom & Dad

### Dispose of Products Safely At the Kousehold Kazardous Waste Collection

Improper disposal of chemicals can be harmful to you and the environment.

- Use up household chemicals completely or give unused portions to a friend and begin to use less toxic chemicals.
- Buy only what you need
- Recycle products whenever possible
- Follow directions on the product label
- HHW collections are offered in the spring and fall.

#### DO NOT POUR IT DOWN THE DRAIN!

For information on the next household hazardous waste collection call the Household Hazardous Waste Hotline (979) 764-3809

Or log on to the the BVSWMA website for more information



### Are you allowed to use the internet?

With your parents permission check out these really cool sites!

Clean Sweep USA <a href="http://www.kab.org/kids">http://www.kab.org/kids</a>

Eco Kids On-line: Our Planet Our Future

http://www.ecokidsonline.com/

Environmental Education for Kids! (EEK)

http://www.dnr.state.wi.us/org/caer/ce/eek/earth/recycle/

Kid's Corner

http://www.nsc.org/ehc/kidscorn.htm

Roscoe's Recycle Room

http://www.recycleroom.org

**Recycle City** 

http://www.epa.gov/recyclecity/

Kids for Saving Earth

http://www.kidsforsavingearth.org/index high.html

Washington State Department of Ecology Kids Page <a href="http://www.ecy.wa.gov/programs/swfa/kidspage/">http://www.ecy.wa.gov/programs/swfa/kidspage/</a>

Walmart Kids Recycling Challenge <a href="http://www.kidsrecyclingchallenge.com/about.html">http://www.kidsrecyclingchallenge.com/about.html</a>

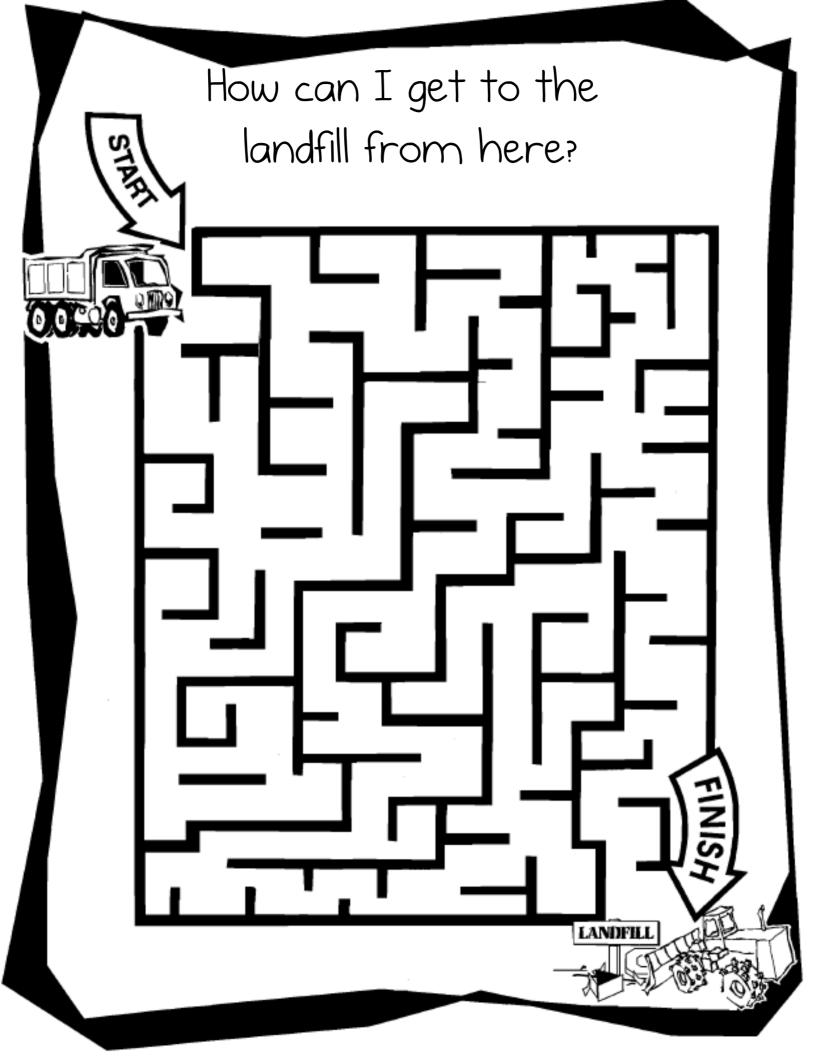
EPA Environmental Kids Club – Garbage and Recycling <a href="http://www.epa.gov/kids/garbage.htm">http://www.epa.gov/kids/garbage.htm</a>

Great Recycling Links for Kids <a href="http://www.kidsrecycle.org/kids-links.php">http://www.kidsrecycle.org/kids-links.php</a>

Kids Games and Activities <a href="http://www.activityvillage.co.uk/recycling">http://www.activityvillage.co.uk/recycling</a> for kids.htm

Earth 911 <a href="http://earth911.org/">http://earth911.org/</a>





There is some stuff that just can't be recycled. So it has to go to the landfill in College Station.

The landfill takes in approximately 1000 tons of trash a day!



# This Certificate is to Acknowledge that



Waste Reduction and Recycling Handbook for the Brazos Valley Solid Waste Management Agency. Has officially completed the

From this day forward you are the

"Tiotector of Planet Carth

I pledge to always reduce waste and recycle when possible. I will remind those around me of the importance of recycling and caring for this planet.



### Hey kids would you like to see me in person?

I like to educate all ages on different environmental topics, such as waste reduction, composting, recycling, and hazardous waste.

I love to visit schools to talk to kids or going to different organizations or block parties. I am always available to come and speak to you!

Talk to your parents and teachers to request my presence at a meeting, in a classroom, or at an event!

For more information please call BVSWMA 979-764-3806 or visit www.cstx.gov/BVSWMA.

